

Abstract

[0158] The present invention is a unified spine structure that EFEM components, such as a wafer handling robot and a SMIF pod advance assembly, may mount to. The frame includes multiple vertical struts that are mounted to an upper support member and a lower support member. Structurally tying the vertical struts to the support members creates a rigid body to support the EFEM components. The vertical struts also provide a common reference that the EFEM components may align with. This eliminates the need for each EFEM component to align with respect to each other. Thus, if one EFEM component is removed it will not affect the alignment and calibration of the remaining secured EFEM components. The unified frame also creates an isolated storage area for the SMIF pod door and the port door within the environment that is isolated from the outside ambient conditions.